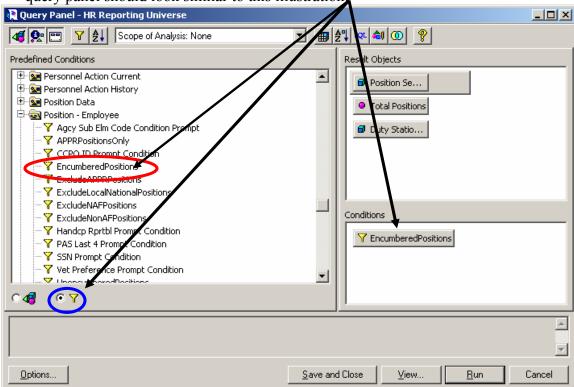
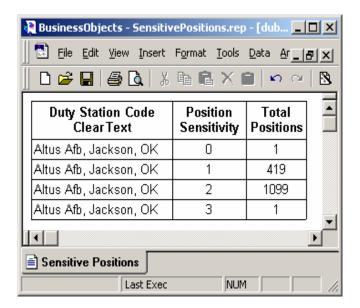
How to Create a Simple Report Variable

- 1. Create a simple report entitled "Sensitivity Report". This report will show total encumbered positions and show the number of positions coded as sensitive for security access purposes. Select the following objects from the HR Reporting Universe:
 - a. Duty Station Clear Text (Position Data class) (This object is optional if you are creating the report for one location, only)
 - b. Total Positions (Position Data class)
 - c. Position Sensitivity (Security Clearance class)

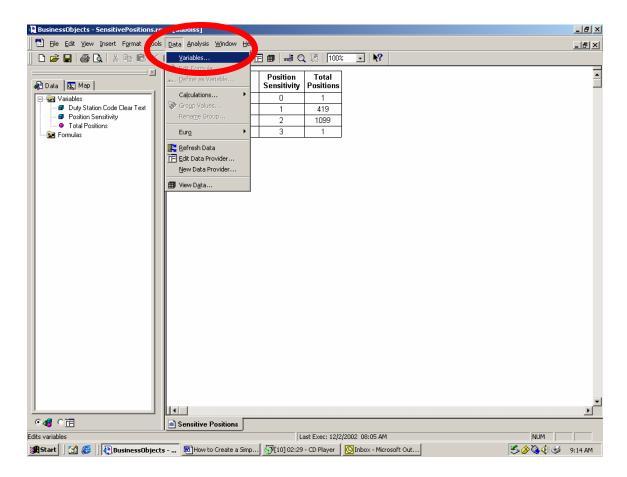
2. Select the 'Encumbered Positions' filter in the conditions of the query panel. The query panel should look similar to this illustration:



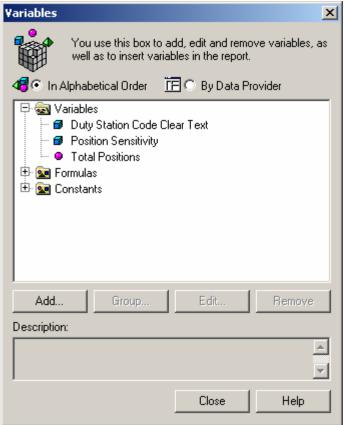
3. Run the report. For display purposes, the titles were formatted to wrap the text and the report manager was closed:



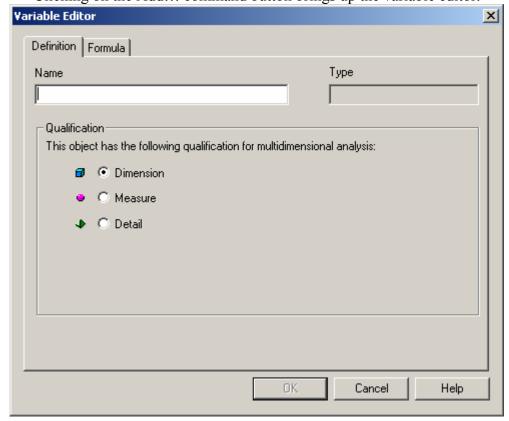
- 4. In this example, the total encumbered positions by category at Altus AFB are displayed. If the requirement is to report on total positions by Position Sensitivity codes 1 and 2, this could be restricted by the Position Sensitivity codes in the query panel (data provider) or a report variable can be created. A word of caution: Report variables are only good for the report for which they are created. They cannot be shared among users nor imported into a universe. A user object, on the other hand can be shared among users and imported into a universe. This subject will be covered in a future 'tip or trick.'
- 5. There are two ways a report variable can be created. This tutorial will show one. Using the menu word <u>Data</u> then <u>Variables...</u> as shown here:



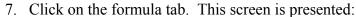
This invokes the Variables dialog (shown here):

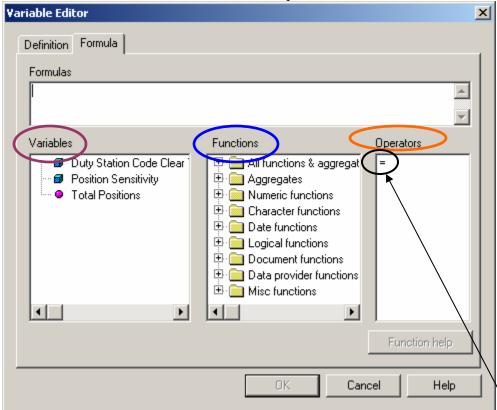


Clicking on the Add... command button brings up the variable editor.



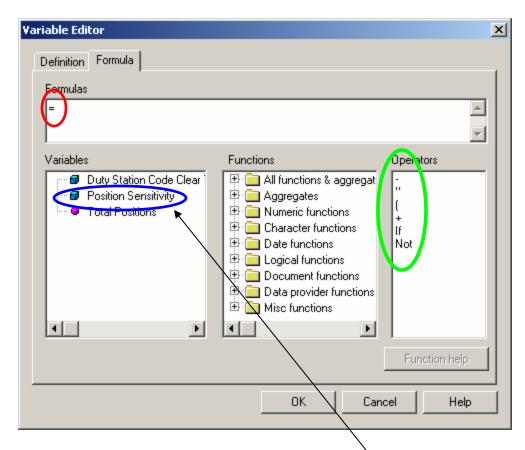
6. Ensure you give the variable a name on the Definition tab before clicking on the Formula tab. The name we've chosen is 'PosnSens'.



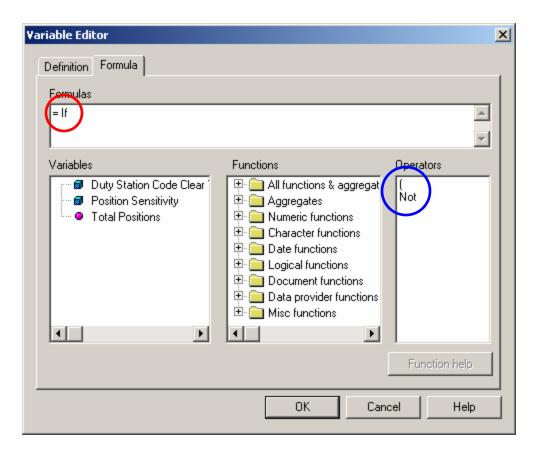


The <u>Variables</u> you previously selected for the report are in the leftmost window with the <u>Functions</u> that can be used to create the variable in the center window and the <u>Operators</u> used to act on the variables in the rightmost window. Currently an 'equals sign' is showing in the Operators window. As you select functions or variables the list of operators will change based on what is syntactically correct. This means that only those operators recognized by the variable editor can be used in the formula. If you attempt to use an operator not part of the 'approved' group of operators, it's likely the formula will not work and you will not be able to create the formula.

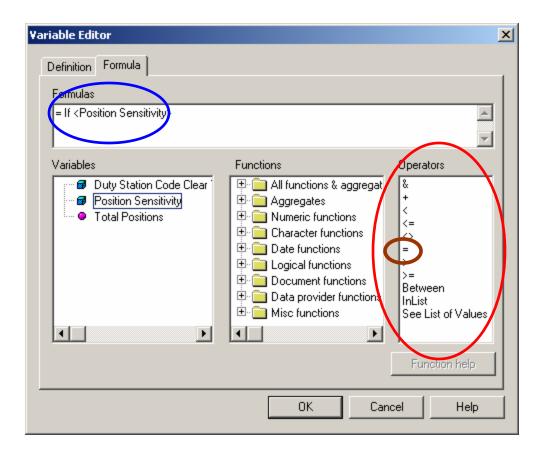
- 8. The definition of what you expect to see in the report is an important step in creating the formula that will cause the variable to appear, or act on the other variables in the report. This hypothetical user wishes to create a report that will show the total positions at a location and then a total of the positions that have two specific security clearance sensitivity codes (it's not important to have these broken out by the type of code just a total is required). The PosnSens variable (remember our previous screen where we added the name 'PosnSens' to the definition?) will give us the value we're after.
- 9. First, double click on the equals sign in the operator's window. You will notice the operator list changed and the equals sign is now in the 'Formulas' window as shown in the next screen shot:



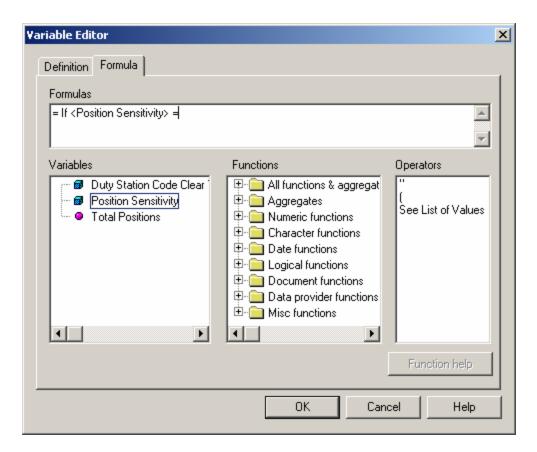
10. The variable that will be modified is 'Position Sensitivity'. Since we are looking at restricting this new variable to two Position Sensitivity codes and we are going to be counting how many of the positions meet the criteria we will first select the 'If' operator. Double click on the 'If' operator and it will now be part of the formula window to the right of the equal operator as shown:



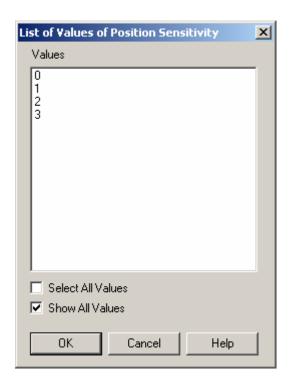
11. This tutorial will not detail all of the operator actions or the functions that can be considered as we build this formula. That's reserved for future tips and tricks. At this point we want to ask the question 'if the position sensitivity code is a '0' or a '1', then give the variable a value of "1", otherwise, give the variable a value of "0". Our next step is to double click on the 'Position Sensitivity' variable. This variable will now appear next to the = If statement in the formulas window with brackets around it. The operators window changes as well:



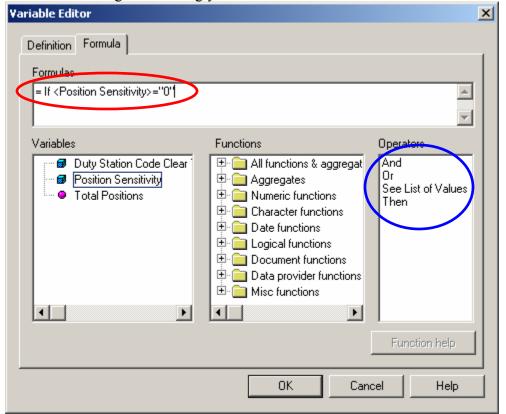
12. The next step is to add an equals sign to the equation because we said we wanted to assign a variable a value based on the codes found in the Position Sensitivity field. Double click on the equals sign (brown circle) in the operator's window. Again, the view changes:



13. Here's where things can get a bit tricky. The field 'Position Sensitivity' is a 'character' field in the database even though the codes are input into the system as numbers. The reason it's tricky is the field type governs our selection of operator. In this example we need to put the field values into quotes to designate the field type as a character. Double click on the equals sign, type a zero character and double click on the equals sign again. **OR...**double click on the words 'See List of Values' in the operator's window. This dialog appears:

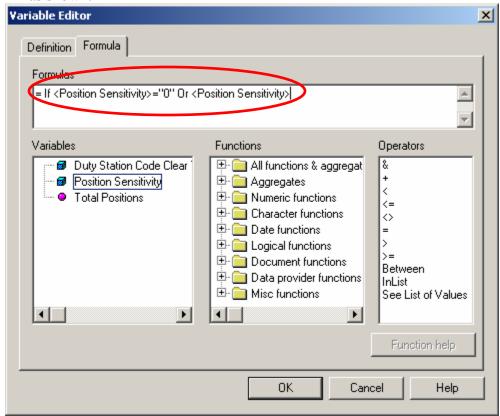


14. All values currently in the database in the Position Sensitivity field are listed. Select the first value you wish to evaluate and click OK. The formula editor window changes accordingly:

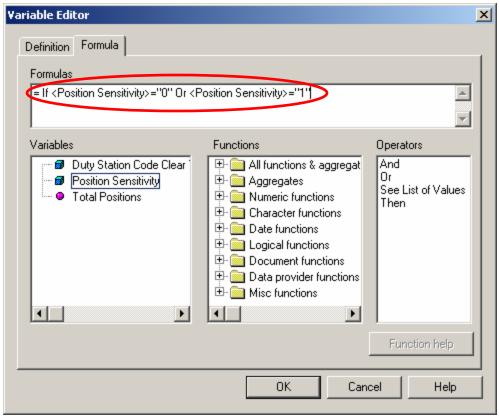


If you know of another code that should be in the list, but does not appear because it has not yet appeared in the database, you will need to 'type' the value surrounded by double quote marks.

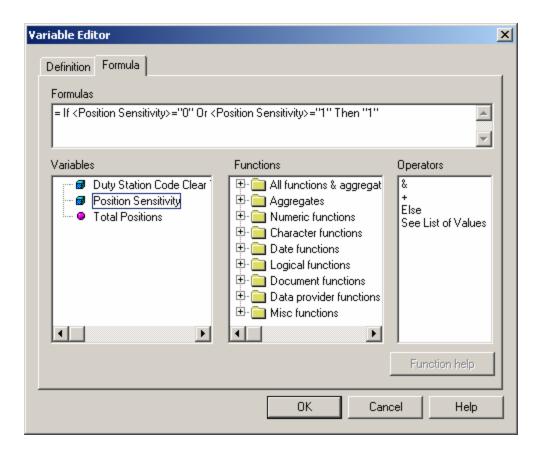
15. Our criteria is missing the value of "1". We need to add this value to the right side of the equation to complete the 'if' statement. Select the 'Or' operator from the operator window and the field 'Position Sensitivity' from the variable window as shown:



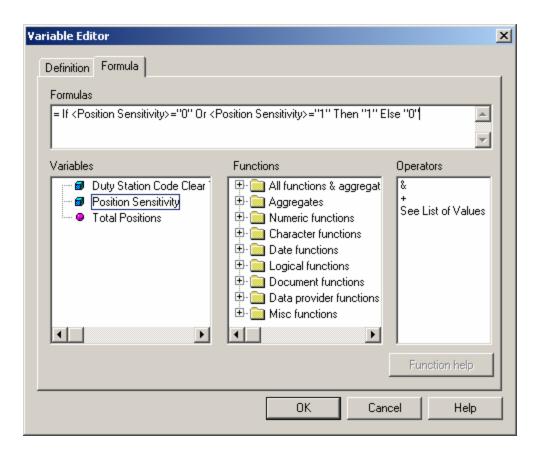
16. Select the 'equal' operator from the operator window and type an open double quote mark, the number 1 and type a close quote mark. We took a little shortcut to illustrate that it is not necessary to double click on operators to construct equations. This is stressed for new users to prevent needless syntax errors. Our new formula now looks like this:



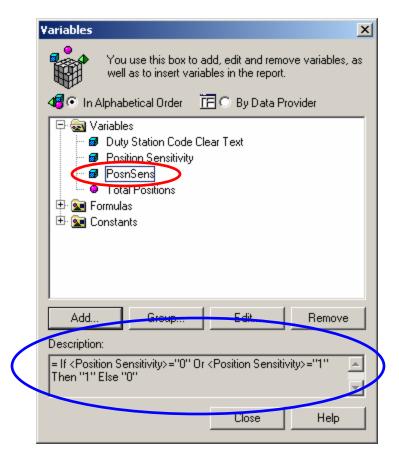
- 17. The statement thus far translates into: "if the value of 0 or 1 for the Position Sensitivity field is true..." We next have to cause the evaluation of this expression to give us some results.
- **18.** Select the 'Then' operator in the operator's window. In an earlier step (11) we posed the question: 'if the position sensitivity code is a '0' or a '1', then give the variable a value of "1", otherwise, give the variable a value of "0". Rules of syntax require us to define any value as character since this field is a character and we can't mix characters with numbers (unless we use a function this is reserved for a future topic). Type a double quote mark (or double click the double quote mark in the operator window) a value of 1 and then close the quote. The formula editor presents you with another set of operator choices:



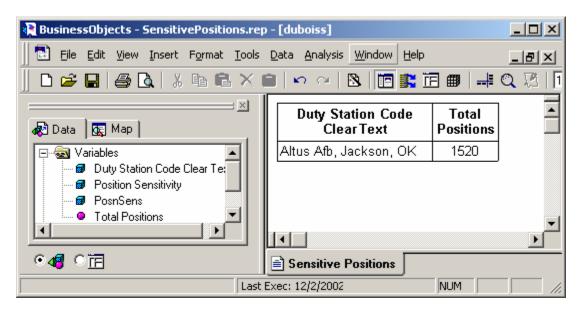
19. The second half of the result sentence reads 'otherwise, give the variable a value of "0" needs to be added here. The 'Else' operator does this. Double click on Else and type the open quote, type a 0 and close quote. The completed formula should look like this:



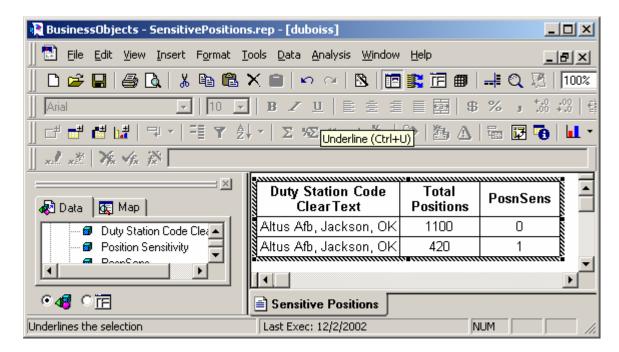
20. Click OK. If there are no syntax errors, the variables dialog should appear:



- 21. This variable is now available for use in a report.
- 22. Delete the column 'Position Sensitivity'. The report shows Altus AFB with a total of 1520 encumbered positions:



23. Drag and drop the PosnSens variable to the right of Total Positions.



24. The original total of 1520 is further defined as 420 positions with a Position Sensitivity code or 0 or 1 and 1100 positions of every other code.